SEQUENCE LISTING

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BOONE, THOMAS CHARLES

<120> ADHESION ANTAGONISTS (as amended)

<130> A-688A

<140> US 09/840,277
<141> 2001-04-23

<150> US 60/198,919
<151> 2000-04-21

<150> US 60/201,394
<151> 2000-05-03

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<170> PatentIn version 3.2

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Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
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ggg gga ccg tca gtc ttc ctc ttc ccc cca aaa ccc aag gac acc ctc       96
Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
            20                  25                  30

atg atc tcc cgg acc cct gag gtc aca tgc gtg gtg gtg gac gtg agc      144
Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
        35                  40                  45

cac gaa gac cct gag gtc aag ttc aac tgg tac gtg gac ggc gtg gag      192
His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
    50                  55                  60

gtg cat aat gcc aag aca aag ccg cgg gag gag cag tac aac agc acg      240
Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
65                  70                  75                  80

tac cgt gtg gtc agc gtc ctc acc gtc ctg cac cag gac tgg ctg aat      288
Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
                85                  90                  95

ggc aag gag tac aag tgc aag gtc tcc aac aaa gcc ctc cca gcc ccc      336
Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
            100                 105                 110

atc gag aaa acc atc tcc aaa gcc aaa ggg cag ccc cga gaa cca cag      384
Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
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gtg tac acc ctg ccc cca tcc cgg gat gag ctg acc aag aac cag gtc      432
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Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
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agc ctg acc tgc ctg gtc aaa ggc ttc tat ccc agc gac atc gcc gtg      480
Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
145                 150                 155                 160

gag tgg gag agc aat ggg cag ccg gag aac aac tac aag acc acg cct      528
Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
                165                 170                 175

ccc gtg ctg gac tcc gac ggc tcc ttc ttc ctc tac agc aag ctc acc      576
Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
            180                 185                 190

gtg gac aag agc agg tgg cag cag ggg aac gtc ttc tca tgc tcc gtg      624
Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
        195                 200                 205

atg cat gag gct ctg cac aac cac tac acg cag aag agc ctc tcc ctg      672
Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
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Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
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Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
        35                  40                  45

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
    50                  55                  60

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
65                  70                  75                  80

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
                85                  90                  95

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
            100                 105                 110

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
        115                 120                 125

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
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130 135 140

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
145 150 155 160

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
165 170 175

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
180 185 190

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
195 200 205

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
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Ser Pro Gly Lys
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Gly Pro Asn Gly Gly
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Gly Thr Ile Cys Lys Arg Ala Arg Gly Asp Asp Met Asp Asp Tyr Cys
20 25 30

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35 40 45

Thr

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Arg Xaa Glu Thr Xaa Trp Xaa
1 5

<210> 10

<400> 10
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<220>
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<222> (2, 3, 7 and)..(8)
<223> Xaa is any amino acid

<400> 11

Cys Xaa Xaa Arg Leu Asp Xaa Xaa Cys
1 5

<210> 12

<400> 12
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<210> 13
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<220>
<223> RGD, NGR derivative peptide

<220>
<221> misc_feature
<222> (1, 2, 3, 7, 8 and)..(9)
<223> Xaa is any amino acid with Xaa at 1, 3, 7 and 9 capable of forming a bridge.

<400> 13

Xaa Xaa Xaa Arg Gly Asp Xaa Xaa Xaa
1 5

<210> 14
<211> 17
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<220>
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<220>

<221> misc_feature
<222> (2, 3, 4, 5, 6, 12, 13, 14, 15 and)..(16)
<223> At positions 2, 3, 4, 5, 6, 12, 13, 14, 15 and 16, Xaa is any amino acid or may be absent.

<400> 14

Cys Xaa Xaa Xaa Xaa Xaa Cys Arg Gly Asp Cys Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Cys

<210> 15
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<220>
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<220>
<221> misc_feature
<222> (1 and)..(8)
<223> Xaa is an independently selected amino acid.

<220>
<221> misc_feature
<222> (2 and)..(7)
<223> Xaa is any amino acid, each which is independently selected.

<220>
<221> misc_feature
<222> (5)..(5)
<223> Xaa is selected from the group consisting of glycine and leucine.

<220>
<221> misc_feature
<222> (6)..(6)
<223> Xaa is selected from the group consisting of tryptophan and leucine.

<400> 15

Xaa Xaa Asp Asp Xaa Xaa Xaa Xaa
1 5

<210> 16
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<222> (1 and)..(10)
<223> Xaa is any amino acid.

<220>
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<222> (2 and)..(9)

<223> Xaa equals 0 to 3 amino acids.

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<221> misc_feature
<222> (3)..(3)
<223> Xaa is selected from the group consisting of tryptophan and proline.

<220>
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<222> (6)..(6)
<223> Xaa is selected from the group consisting of glycine and leucine.

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<222> (7)..(7)
<223> Xaa is selected from the group consisting of tryptophan and leucine.

<220>
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<222> (8)..(8)
<223> Xaa is selected from the group consisting of leucine, tryptophan, and methionine.

<400> 16

Xaa Xaa Xaa Asp Asp Xaa Xaa Xaa Xaa Xaa
1 5 10

<210> 17
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Arg Lys Xaa Asn Xaa Xaa Trp Thr Trp Val Gly Thr Xaa Lys Xaa Leu
1 5 10 15

Thr Glu Glu

<210> 18
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<222> (2, 3, 4, 7)..(15)
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<400> 18

Cys Xaa Xaa Xaa Tyr Thr Xaa Leu Val Ala Ile Gln Asn Lys Xaa Glu
1 5 10 15

<210> 19
<211> 19
<212> PRT
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<222> (3, 4, 5, 6, 8, 13, 15)..(18)
<223> Xaa is any naturally occuring amino acid residue.

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Arg Lys Xaa Xaa Xaa Xaa Trp Xaa Trp Val Gly Thr Xaa Lys Xaa Leu
1 5 10 15

Thr Xaa Glu

<210> 20
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<223> Xaa is any naturally occuring amino acid residue.

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1 5 10 15

<210> 21
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<223> Xaa is any naturally occuring amino acid residue.

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Xaa Lys Xaa Lys Thr Xaa Glu Ala Xaa Asn Trp Xaa Xaa

1 5 10

<210> 22
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<400> 22

Cys Leu Cys Arg Gly Asp Cys Ile Cys
1 5

<210> 23
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<400> 23

Cys Trp Asp Asp Gly Trp Leu Cys
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<210> 24
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Cys Trp Asp Asp Leu Trp Trp Leu Cys
1 5

<210> 25
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<400> 25

Cys Trp Asp Asp Gly Leu Met Cys
1 5

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Cys Trp Asp Asp Gly Trp Met Cys
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1 5

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Cys Leu Ser Gly Ser Leu Ser Cys
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Asn Gly Arg Ala His Ala
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<400> 43

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<210> 45
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Gly Asp Leu Asp Leu Leu Lys Leu Arg Leu Thr Leu
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<210> 47
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Arg Asp Asp Leu His Met Leu Arg Leu Gln Leu Trp
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Cys Xaa Xaa Arg Gly Asp Cys
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Ser Thr Gly Gly Phe Asp Asp Val Tyr Asp Trp Ala Arg Gly Val Ser
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Ser Ala Leu Thr Thr Thr Leu Val Ala Thr Arg
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Ser Ala Leu Thr Thr Thr Leu Val Ala Thr Arg
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1 5 10 15

Met Lys Glu Ala Ser Asn Val Phe Pro Ser Arg Arg Ser Arg
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Ser Ser Gln Asn Trp Asp Met Glu Ala Gly Val Glu Asp Leu Thr Ala
1 5 10 15

Ala Met Leu Gly Leu Leu Ser Thr Ile His Ser Ser Ser Arg
20 25 30

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<400> 55

Ser Ser Pro Ser Leu Tyr Thr Gln Phe Leu Val Asn Tyr Glu Ser Ala
1 5 10 15

Ala Thr Arg Ile Gln Asp Leu Leu Ile Ala Ser Arg Pro Ser Arg
20 25 30

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Ser Ser Thr Gly Trp Val Asp Leu Leu Gly Ala Leu Gln Arg Ala Ala
1 5 10 15

Asp Ala Thr Arg Thr Ser Ile Pro Pro Ser Leu Gln Asn Ser Arg
20 25 30

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Glu Lys

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Cys Pro Ser Arg Leu Asp Ser Pro Cys

1 5

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Cys Asp Cys Arg Gly Asp Cys Phe Cys
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Cys Asp Cys Arg Gly Asp Cys Leu Cys
1 5

<210> 64
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<210> 66
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Asp Ile Thr Trp Asp Glu Leu Trp Lys Ile Met Asn
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<210> 67
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Asp Tyr Thr Trp Phe Glu Leu Trp Asp Met Met Gln
1 5 10

<210> 68
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<400> 68

Gln Ile Thr Trp Ala Gln Leu Trp Asn Met Met Lys
1 5 10

<210> 69
<211> 12
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<400> 69

Asp Met Thr Trp His Asp Leu Trp Thr Leu Met Ser
1 5 10

<210> 70
<211> 12
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<400> 70

Asp Tyr Ser Trp His Asp Leu Trp Glu Met Met Ser
1 5 10

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Glu Ile Thr Trp Asp Gln Leu Trp Glu Val Met Asn
1 5 10

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His Val Ser Trp Glu Gln Leu Trp Asp Ile Met Asn
1 5 10

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<400> 73

His Ile Thr Trp Asp Gln Leu Trp Arg Ile Met Thr
1 5 10

<210> 74
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<400> 74

Arg Asn Met Ser Trp Leu Glu Leu Trp Glu His Met Lys
1 5 10

<210> 75
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<220>
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<400> 75

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1 5 10 15

Ser Gln

<210> 76

<211> 14
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<400> 76

His Arg Ala Glu Trp Leu Ala Leu Trp Glu Gln Met Ser Pro
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Lys Lys Glu Asp Trp Leu Ala Leu Trp Arg Ile Met Ser Val
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<400> 78

Ile Thr Trp Asp Gln Leu Trp Asp Leu Met Lys
1 5 10

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<400> 79

Asp Ile Thr Trp Asp Gln Leu Trp Asp Leu Met Lys
1 5 10

<210> 80
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Asp Ile Thr Trp Asp Gln Leu Trp Asp Leu Met Lys
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<400> 81

Asp Ile Thr Trp Asp Gln Leu Trp Asp Leu Met Lys
1 5 10

<210> 82
<211> 16
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<213> Artificial Sequence

<220>
<223> Selectin antagonist peptide

<400> 82

Cys Gln Asn Arg Tyr Thr Asp Leu Val Ala Ile Gln Asn Lys Asn Glu
1 5 10 15

<210> 83
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Selectin antagonist peptide

<400> 83

Ala Glu Asn Trp Ala Asp Asn Glu Pro Asn Asn Lys Arg Asn Asn Glu
1 5 10 15

Asp

<210> 84
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Selectin antagonist peptide

<400> 84

Arg Lys Asn Asn Lys Thr Trp Thr Trp Val Gly Thr Lys Lys Ala Leu
1 5 10 15

Thr Asn Glu

<210> 85
<211> 13
<212> PRT

<213> Artificial Sequence

<220>
<223> Selectin antagonist peptide

<400> 85

Lys Lys Ala Leu Thr Asn Glu Ala Glu Asn Trp Ala Asp
1 5 10

<210> 86
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Selectin antagonist peptide

<220>
<221> misc_feature
<222> (3 and)..(15)
<223> Xaa is any amino acid residue

<400> 86

Cys Gln Xaa Arg Tyr Thr Asp Leu Val Ala Ile Gln Asn Lys Xaa Glu
1 5 10 15

<210> 87
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (13 and)..(15)
<223> Xaa is any amino acid residue

<400> 87

Ala Glu Asn Trp Ala Asp Gly Glu Pro Asn Asn Lys Xaa Asn Xaa Glu
1 5 10 15

Asp

<210> 88
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Vinculin binding peptide

<400> 88

Ser Ser Gln Asn Trp Asp Met Glu Ala Gly Val Glu Asp Leu Thr Ala
1 5 10 15

Ala Met Leu Gly Leu Leu Ser Thr Ile His Ser Ser Ser Arg
20 25 30

<210> 89
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Vinculin binding peptide

<400> 89

Ser Ser Pro Ser Leu Tyr Thr Gln Phe Leu Val Asn Tyr Glu Ser Ala
1 5 10 15

Ala Thr Arg Ile Gln Asp Leu Leu Ile Ala Ser Arg Pro Ser Arg
20 25 30

<210> 90
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Vinculin binding peptide

<400> 90

Ser Ser Thr Gly Trp Val Asp Leu Leu Gly Ala Leu Gln Arg Ala Ala
1 5 10 15

Asp Ala Thr Arg Thr Ser Ile Pro Pro Ser Leu Gln Asn Ser Arg
20 25 30

<210> 91
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Vinculin binding peptide

<400> 91

Asp Val Tyr Thr Lys Lys Glu Leu Ile Glu Cys Ala Arg Arg Val Ser
1 5 10 15

Glu Lys

<210> 92
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Vinculin binding peptide

<400> 92

Ser Thr Gly Gly Phe Asp Asp Val Tyr Asp Trp Ala Arg Gly Val Ser
1 5 10 15

Ser Ala Leu Thr Thr Thr Leu Val Ala Thr Arg
20 25

<210> 93
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Vinculin binding peptide

<400> 93

Ser Thr Gly Gly Phe Asp Asp Val Tyr Asp Trp Ala Arg Arg Val Ser
1 5 10 15

Ser Ala Leu Thr Thr Thr Leu Val Ala Thr Arg
20 25

<210> 94
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Vinculin binding peptide

<400> 94

Ser Arg Gly Val Asn Phe Ser Glu Trp Leu Tyr Asp Met Ser Ala Ala
1 5 10 15

Met Lys Glu Ala Ser Asn Val Phe Pro Ser Arg Arg Ser Arg
20 25 30

<210> 95
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 95

Arg Glu Asp Val Glu Ile Leu Asp Val Tyr Ile Gly Ser Arg Pro Asp
1 5 10 15

Ser Gly Arg

<210> 96
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 96

Tyr Ile Gly Ser Arg Arg Glu Asp Val Glu Ile Leu Asp Val Pro Asp
1 5 10 15

Ser Gly Arg

<210> 97
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Used to form echistatin template for PCR

<400> 97
gggggggcata tggaatgtga atctggtcca tgctgcagaa actg 44

<210> 98
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Used to form echistatin template for PCR

<400> 98
taagttcttg aaggaaggta ccatctgtaa gagagctaga ggtg 44

<210> 99
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Used to form echistatin template for PCR

<400> 99
acgacatgga cgactactgt aacggtaaga cctgtgactg cccg 44

<210> 100
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Used to form echistatin template for PCR

<400> 100
agaaacccac acaagggtcc agctacttaa tggatccgcg gccgcccagc t 51

<210> 101
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Used to form echistatin template for PCR

<400> 101
ttcaagaact tacagtttct gcag 24

<210> 102
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Used to form echistatin template for PCR

<400> 102
cgtccatgtc gtcacctcta gctc 24

<210> 103
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Used to form echistatin template for PCR

<400> 103
gtgtgggttt ctcgggcagt caca 24

<210> 104
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 104
ccgggtaaag gtggaggtgg tggtgaatgt gaatctggtc catgctgc 48

<210> 105
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 105
ccgggtaaag gtggaggtgg tggtgaatgt gaatctggtc catgctgc 48

<210> 106
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 106
aacataagta cctgtaggat cg 22

<210> 107
<211> 49
<212> DNA

<213> Artificial Sequence

<220>
<223> PCR primer

<400> 107
gcagcatgga ccagattcac attcaccacc acctccacct ttacccgga 49

<210> 108
<211> 859
<212> DNA
<213> Artificial Sequence

<220>
<223> Echistatin Fc-peptide

<220>
<221> misc_feature
<222> (1)..(1)
<223> NdeI site

<220>
<221> CDS
<222> (4)..(849)

<220>
<221> misc_feature
<222> (854)..(854)
<223> BamHI site

<400> 108

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cat atg gac aaa act cac aca tgt cca cct tgt cca gct ccg gaa ctc       48
    Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
    1               5                  10                  15

ctg ggg gga ccg tca gtc ttc ctc ttc ccc cca aaa ccc aag gac acc       96
Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
                20                  25                  30

ctc atg atc tcc cgg acc cct gag gtc aca tgc gtg gtg gtg gac gtg      144
Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
            35                  40                  45

agc cac gaa gac cct gag gtc aag ttc aac tgg tac gtg gac ggc gtg      192
Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
        50                  55                  60

gag gtg cat aat gcc aag aca aag ccg cgg gag gag cag tac aac agc      240
Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
    65                  70                  75

acg tac cgt gtg gtc agc gtc ctc acc gtc ctg cac cag gac tgg ctg      288
Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
80                  85                  90                  95

aat ggc aag gag tac aag tgc aag gtc tcc aac aaa gcc ctc cca gcc      336
Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
                100                 105                 110

ccc atc gag aaa acc atc tcc aaa gcc aaa ggg cag ccc cga gaa cca      384
Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
            115                 120                 125

cag gtg tac acc ctg ccc cca tcc cgg gat gag ctg acc aag aac cag      432
Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
        130                 135                 140
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gtc agc ctg acc tgc ctg gtc aaa ggc ttc tat ccc agc gac atc gcc      480
Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
    145                 150                 155

gtg gag tgg gag agc aat ggg cag ccg gag aac aac tac aag acc acg      528
Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
160                 165                 170                 175

cct ccc gtg ctg gac tcc gac ggc tcc ttc ttc ctc tac agc aag ctc      576
Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
                180                 185                 190

acc gtg gac aag agc agg tgg cag cag ggg aac gtc ttc tca tgc tcc      624
Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
            195                 200                 205

gtg atg cat gag gct ctg cac aac cac tac acg cag aag agc ctc tcc      672
Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
        210                 215                 220

ctg tct ccg ggt aaa ggt gga ggt ggt ggt gaa tgt gaa tct ggt cca      720
Leu Ser Pro Gly Lys Gly Gly Gly Gly Gly Glu Cys Glu Ser Gly Pro
    225                 230                 235

tgc tgc aga aac tgt aag ttc ttg aag gaa ggt acc atc tgt aag aga      768
Cys Cys Arg Asn Cys Lys Phe Leu Lys Glu Gly Thr Ile Cys Lys Arg
240                 245                 250                 255

gct aga ggt gac gac atg gac gac tac tgt aac ggt aag acc tgt gac      816
Ala Arg Gly Asp Asp Met Asp Asp Tyr Cys Asn Gly Lys Thr Cys Asp
                260                 265                 270

tgc ccg aga aac cca cac aag ggt cca gct act taatggatcc               859
Cys Pro Arg Asn Pro His Lys Gly Pro Ala Thr
            275                 280
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<210> 109
<211> 282
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 109

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Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
1               5                   10                  15

Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
            20                  25                  30

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
        35                  40                  45

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
    50                  55                  60

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
65                  70                  75                  80
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Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
                85                  90                  95

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
            100                 105                 110

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
        115                 120                 125

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
    130                 135                 140

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
145                 150                 155                 160

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
                165                 170                 175

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
            180                 185                 190

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
        195                 200                 205

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
    210                 215                 220

Ser Pro Gly Lys Gly Gly Gly Gly Gly Glu Cys Glu Ser Gly Pro Cys
225                 230                 235                 240

Cys Arg Asn Cys Lys Phe Leu Lys Glu Gly Thr Ile Cys Lys Arg Ala
                245                 250                 255

Arg Gly Asp Asp Met Asp Asp Tyr Cys Asn Gly Lys Thr Cys Asp Cys
            260                 265                 270

Pro Arg Asn Pro His Lys Gly Pro Ala Thr
        275                 280


<210>  110
<211>  140
<212>  DNA
<213>  Artificial Sequence

<220>
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<222>  (1)..(1)
<223>  AatII site

<220>
<221>  misc_feature
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<222> (140)..(140)
<223> ClaI site

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catacagata accatctgcg gtgataaatt atctctggcg gtgttgacat aaataccact 120

ggcggtgata ctgagcacat 140

<210> 111
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<223> pAMG21

<220>
<221> misc_feature
<222> (1)..(1)
<223> ClaI site

<220>
<221> misc_feature
<222> (55)..(55)
<223> KpnI site

<400> 111
cgatttgatt ctagaaggag gaataacata tggttaacgc gttggaattc ggtac 55

<210> 112
<211> 1546
<212> DNA
<213> Artificial Sequence

<220>
<223> pAMG21

<220>
<221> misc_feature
<222> (1)..(1)
<223> AatII sticky end

<220>
<221> misc_feature
<222> (1546)..(1546)
<223> SacII sticky end

<400> 112
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cgaaaggctc agtcgaaaga ctgggccttt cgttttatct gttgtttgtc ggtgaacgct 120

ctcctgagta ggacaaatcc gccgggagcg gatttgaacg ttgcgaagca acggcccgga 180

gggtggcggg caggacgccc gccataaact gccaggcatc aaattaagca gaaggccatc 240

ctgacggatg gccttttttgc gtttctacaa actcttttgt ttatttttct aaatacattc 300

aaatatggac gtcgtactta acttttaaag tatgggcaat caattgctcc tgttaaaatt 360

gctttagaaa tactttggca gcggtttgtt gtattgagtt tcatttgcgc attggttaaa 420

tggaaagtga ccgtgcgctt actacagcct aatatttttg aaatatccca agagcttttt 480

ccttcgcatg cccacgctaa acattctttt tctcttttgg ttaaatcgtt gtttgattta 540

ttatttgcta tatttatttt tcgataatta tcaactagag aaggaacaat taatggtatg 600

ttcatacacg catgtaaaaa taaactatct atatagttgt ctttctctga atgtgcaaaa 660

ctaagcattc cgaagccatt attagcagta tgaataggga aactaaaccc agtgataaga 720

cctgatgatt tcgcttcttt aattacattt ggagattttt tatttacagc attgttttca 780

aatatattcc aattaatcgg tgaatgattg gagttagaat aatctactat aggatcatat 840

tttattaaat tagcgtcatc ataatattgc ctccattttt tagggtaatt atccagaatt 900

gaaatatcag atttaaccat agaatgagga taaatgatcg cgagtaaata atattcacaa 960

tgtaccattt tagtcatatc agataagcat tgattaatat cattattgct tctacaggct 1020

ttaattttat taattattct gtaagtgtcg tcggcattta tgtctttcat acccatctct 1080

ttatccttac ctattgtttg tcgcaagttt tgcgtgttat atatcattaa aacggtaata 1140

gattgacatt tgattctaat aaattggatt tttgtcacac tattatatcg cttgaaatac 1200

aattgtttaa cataagtacc tgtaggatcg tacaggttta cgcaagaaaa tggtttgtta 1260

tagtcgatta atcgatttga ttctagattt gttttaacta attaaaggag gaataacata 1320

tggttaacgc gttggaattc gagctcacta gtgtcgacct gcagggtacc atggaagctt 1380

actcgaggat ccgcggaaag aagaagaaga agaagaaagc ccgaaaggaa gctgagttgg 1440

ctgctgccac cgctgagcaa taactagcat aacccccttgg ggcctctaaa cgggtcttga 1500

ggggtttttt gctgaaagga ggaaccgctc ttcacgctct tcacgc 1546

<210> 113
<211> 872
<212> DNA
<213> Artificial Sequence

<220>
<223> GM221

<400> 113
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gttagatatt tatcccttgc ggtgatagat tgagcacatc gatttgattc tagaaggagg 120

gataatatat gagcacaaaa aagaaaccat taacacaaga gcagcttgag gacgcacgtc 180

gccttaaagc aatttatgaa aaaaagaaaa atgaacttgg cttatcccag gaatctgtcg 240

cagacaagat ggggatgggg cagtcaggcg ttggtgcttt atttaatggc atcaatgcat 300

taaatgctta taacgccgca ttgcttacaa aaattctcaa agttagcgtt gaagaattta 360

gcccttcaat cgccagagaa tctacgagat gtatgaagcg gttagtatgc agccgtcact 420

tagaagtgag tatgagtacc ctgtttttc tcatgttcag gcagggatgt tctcacctaa 480

gcttagaacc tttaccaaag gtgatgcgga gagatgggta agcacaacca aaaaagccag 540

tgattctgca ttctggcttg aggttgaagg taattccatg accgcaccaa caggctccaa 600

gccaagcttt cctgacggaa tgttaattct cgttgaccct gagcaggctg ttgagccagg 660

tgatttctgc atagccagac ttgggggtga tgagtttacc ttcaagaaac tgatcaggga 720

tagcggtcag gtgtttttac aaccactaaa cccacagtac ccaatgatcc catgcaatga 780

gagttgttcc gttgtgggga aagttatcgc tagtcagtgg cctgaagaga cgtttggctg 840

atagactagt ggatccacta gtgtttctgc cc 872

<210> 114
<211> 1197
<212> DNA
<213> Artificial Sequence

<220>
<223> GM221

<400> 114
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cggaagagag tcaattcagg gtggtgaatg tgaaaccagt aacgttatac gatgtcgcag 120

agtatgccgg tgtctcttat cagaccgttt cccgcgtggt gaaccaggcc agccacgttt 180

ctgcgaaaac gcgggaaaaa gtcgaagcgg cgatggcgga gctgaattac attcccaacc 240

gcgtggcaca acaactggcg ggcaaacagt cgctcctgat tggcgttgcc acctccagtc 300

tggccctgca cgcgccgtcg caaattgtcg cggcgattaa atctcgcgcc gatcaactgg 360

gtgccagcgt ggtggtgtcg atggtagaac gaagcggcgt cgaagcctgt aaagcggcgg 420

tgcacaatct tctcgcgcaa cgcgtcagtg ggctgatcat taactatccg ctggatgacc 480

aggatgccat tgctgtggaa gctgcctgca ctaatgttcc ggcgttattt cttgatgtct 540

ctgaccagac acccatcaac agtattattt tctcccatga agacggtacg cgactgggcg 600

tggagcatct ggtcgcattg ggtcaccagc aaatcgcgct gttagcgggc ccattaagtt 660

ctgtctcggc gcgtctgcgt ctggctggct ggcataaata tctcactcgc aatcaaattc 720

agccgatagc ggaacgggaa ggcgactgga gtgccatgtc cggttttcaa caaaccatgc 780

aaatgctgaa tgagggcatc gttcccactg cgatgctggt tgccaacgat cagatggcgc 840

tgggcgcaat gcgcgccatt accgagtccg ggctgcgcgt tggtgcggat atctcggtag 900

tgggatacga cgataccgaa gacagctcat gttatatccc gccgttaacc accatcaaac 960

aggattttcg cctgctgggg caaaccagcg tggaccgctt gctgcaactc tctcagggcc 1020

aggcggtgaa gggcaatcag ctgttgcccg tctcactggt gaaaagaaaa accaccctgg 1080

cgcccaatac gcaaaccgcc tctccccgcg cgttggccga ttcattaatg cagctggcac 1140

gacaggtttc ccgactggaa agcggacagt aaggtaccat aggatccagg cacagga 1197

<210> 115
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 115

Met Tyr Ile Gly Ser Arg Gly Gly Gly Gly Gly
1 5 10

<210> 116
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 116

Met Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg
1 5 10 15

<210> 117
<211> 26
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 117

Met Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg
1 5 10 15

Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg
20 25

<210> 118
<211> 26
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 118

Met Ile Pro Cys Asn Asn Lys Gly Ala His Ser Val Gly Leu Met Trp
1 5 10 15

Trp Met Leu Ala Arg Gly Gly Gly Gly Gly
20 25

<210> 119
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 119

Met Tyr Ile Gly Ser Arg Arg Glu Asp Val Glu Ile Leu Asp Val Pro

1 5 10 15

Asp Ser Gly Arg Gly Gly Gly Gly Gly
20 25

<210> 120
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 120

Met Arg Gly Asp Arg Gly Asp Tyr Ile Gly Ser Arg Arg Gly Asp Gly
1 5 10 15

Gly Gly Gly Gly
20

<210> 121
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Encoding Laminin related peptide, for PCR reaction to yield in-frame fusion to Fc

<400> 121
gaataacata tgtacatcgg ttctcgtggt ggaggcggtg gggacaaa 48

<210> 122
<211> 81
<212> DNA
<213> Artificial Sequence

<220>
<223> Encoding Laminin related peptide, for PCR reaction to yield in-frame fusion to Fc

<400> 122
gaataacata tgtacatcgg ttctcgttat attggctccc gctacattgg tagccgtgac 60

aaaactcaca catgtccacc t 81

<210> 123
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<223> Encoding Laminin related peptide, for PCR reaction to yield in-frame fusion to Fc

<400> 123
gaataacata tgtacatcgg ttctcgttat attggctccc gctacattgg tagccgttat 60

atcggctctc gctatattgg tagccgcgac aaaactcaca catgtccacc t 111

<210> 124
<211> 93
<212> DNA
<213> Artificial Sequence

<220>
<223> Encoding Laminin related peptide, for PCR reaction to yield in-frame fusion to Fc

<400> 124
gaataacata tgatcccgtg caacaacaaa ggtgctcact ctgttggtct gatgtggtgg 60

atgctggctc gtggtggagg cggtggggac aaa 93

<210> 125
<211> 90
<212> DNA
<213> Artificial Sequence

<220>
<223> Encoding Laminin related peptide, for PCR reaction to yield in-frame fusion to Fc

<400> 125
gaataacata tgtacatcgg ttctcgtcgt gaagacgttg aaatcctgga cgttccggac 60

tctggtcgtg gtggaggcgg tggggacaaa 90

<210> 126
<211> 75
<212> DNA
<213> Artificial Sequence

<220>
<223> Encoding Laminin related peptide, for PCR reaction to yield in-frame fusion to Fc

<400> 126
gaataacata tgcgtggtga ccgtggtgac tacatcggtt ctcgtcgtgg tgacggtgga 60

ggcggtgggg acaaa 75

<210> 127
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Encoding Laminin related peptide, for PCR reaction to yield in-frame fusion to Fc

<400> 127
gttattgctc agcggtggca 20

<210> 128
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 128

Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg
1 5 10

<210> 129
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 129

Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg
1 5 10 15

<210> 130
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 130

Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr
1 5 10 15

Ile Gly Ser Arg
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<210> 131
<211> 25
<212> PRT
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1 5 10 15

Ile Gly Ser Arg Tyr Ile Gly Ser Arg
20 25

<210> 132
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<400> 132

Ile Pro Cys Asn Asn Lys Gly Ala His Ser Val Gly Leu Met Trp Trp
1 5 10 15

Met Leu Ala Arg
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<210> 133
<211> 19
<212> PRT
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<220>
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<400> 133

Tyr Ile Gly Ser Arg Arg Glu Asp Val Glu Ile Leu Asp Val Pro Asp
1 5 10 15

Ser Gly Arg

<210> 134
<211> 14
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<220>
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<400> 134

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1 5 10

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<400> 135

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1 5 10 15

Ile Gly Ser Arg Tyr Ile Gly Ser Arg
20 25

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<400> 136

Arg Glu Asp Val Glu Ile Leu Asp Val Tyr Ile Gly Ser Arg Pro Asp
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Ser Gly Arg

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Ser Gly Arg

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<400> 139

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1 5

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1 5 10

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